

Biomek Set-up

Figure 1

Genewriter - Oligonucleotide Pooling Plan

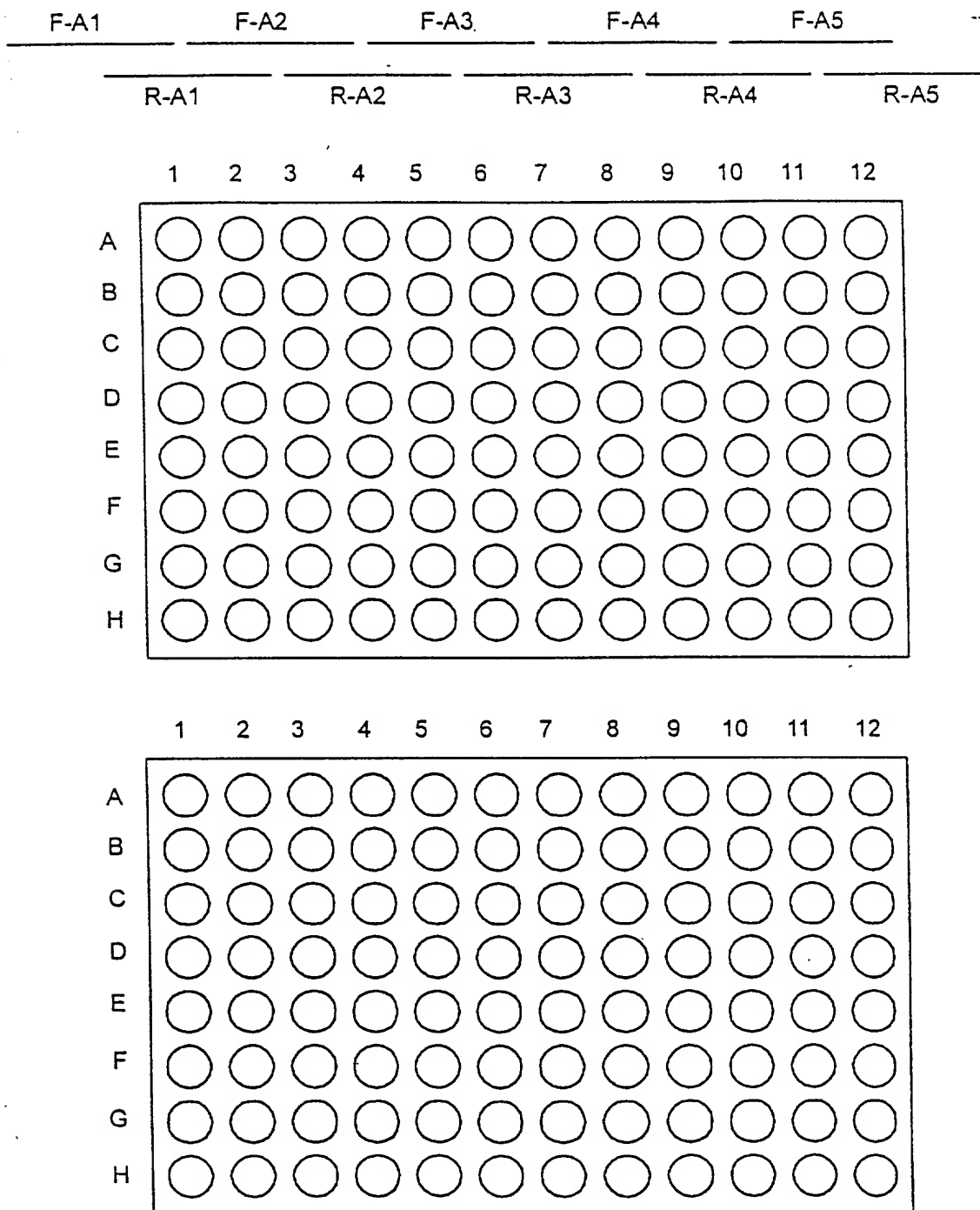


Figure 2

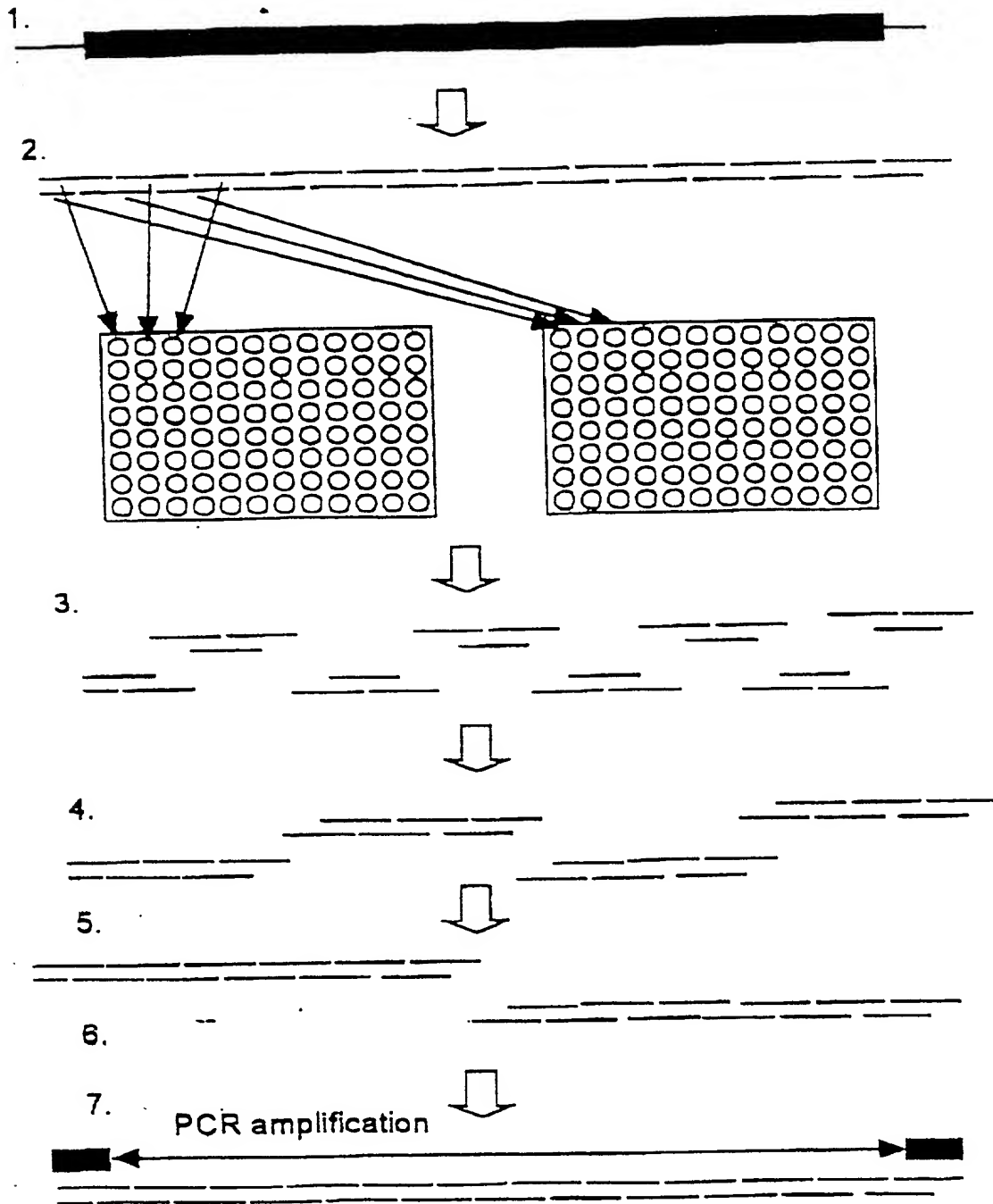


Figure 3

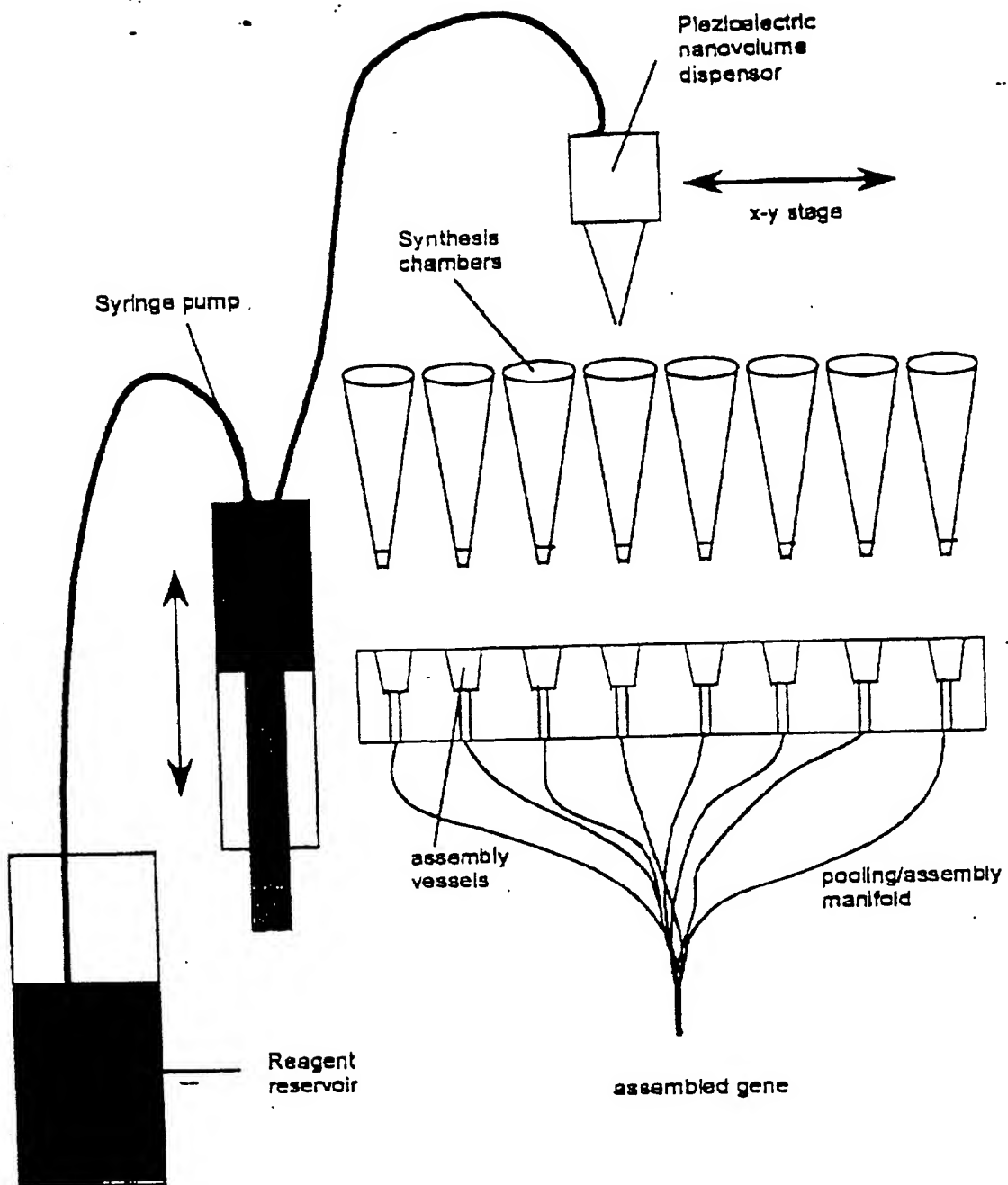


Figure 4

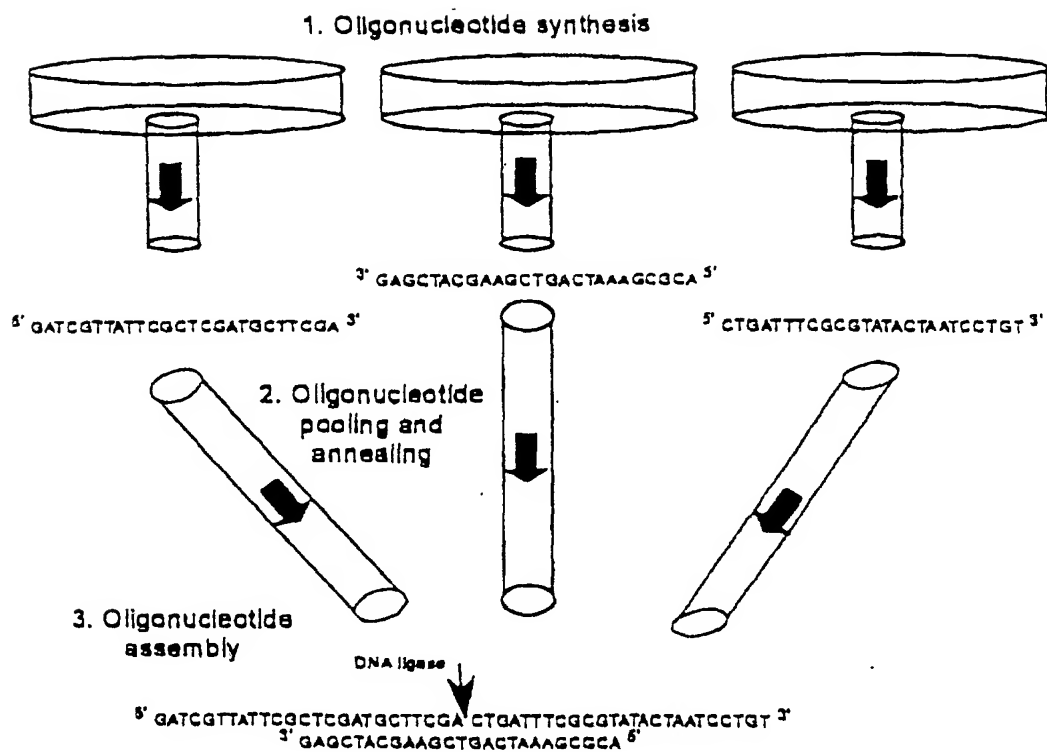


Figure 5

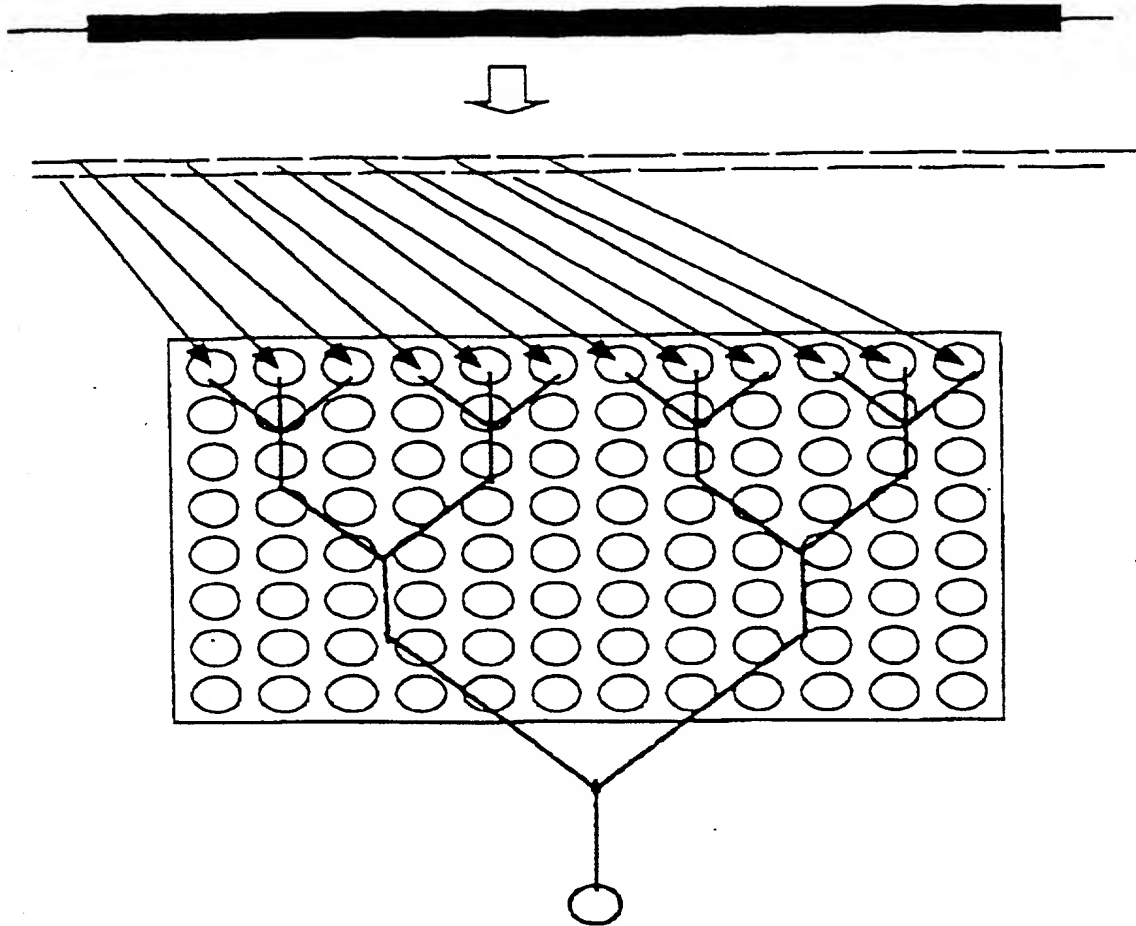


Figure 6

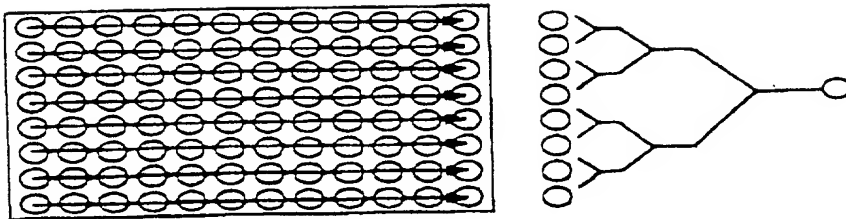


Figure 7

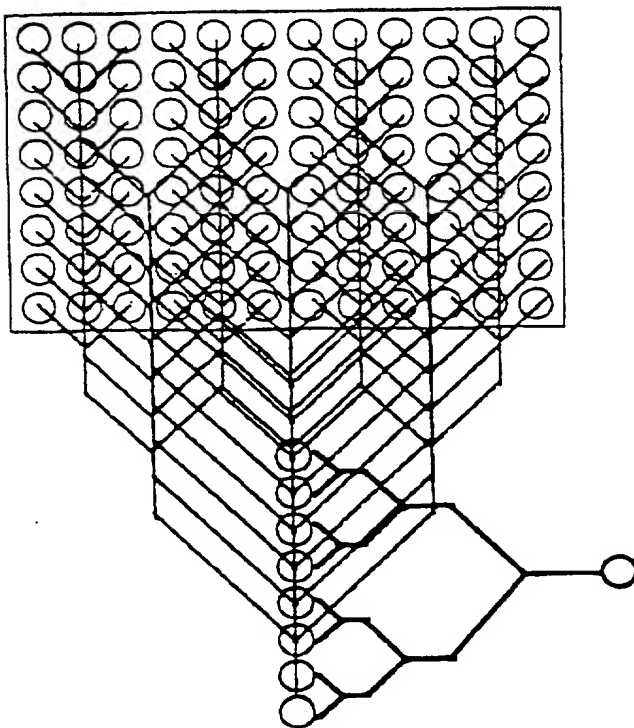


Figure 8

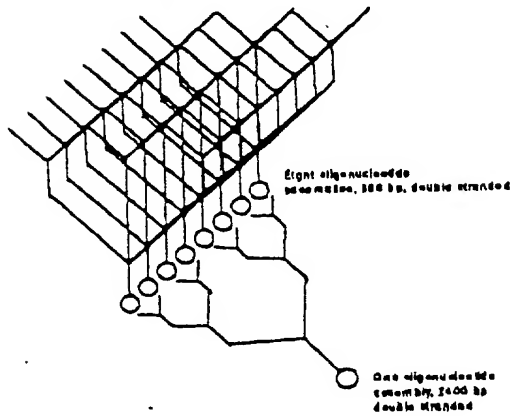
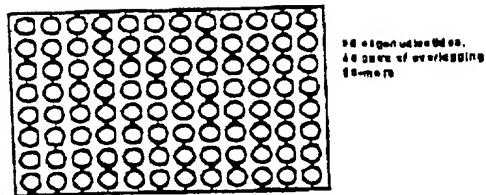


Figure 9

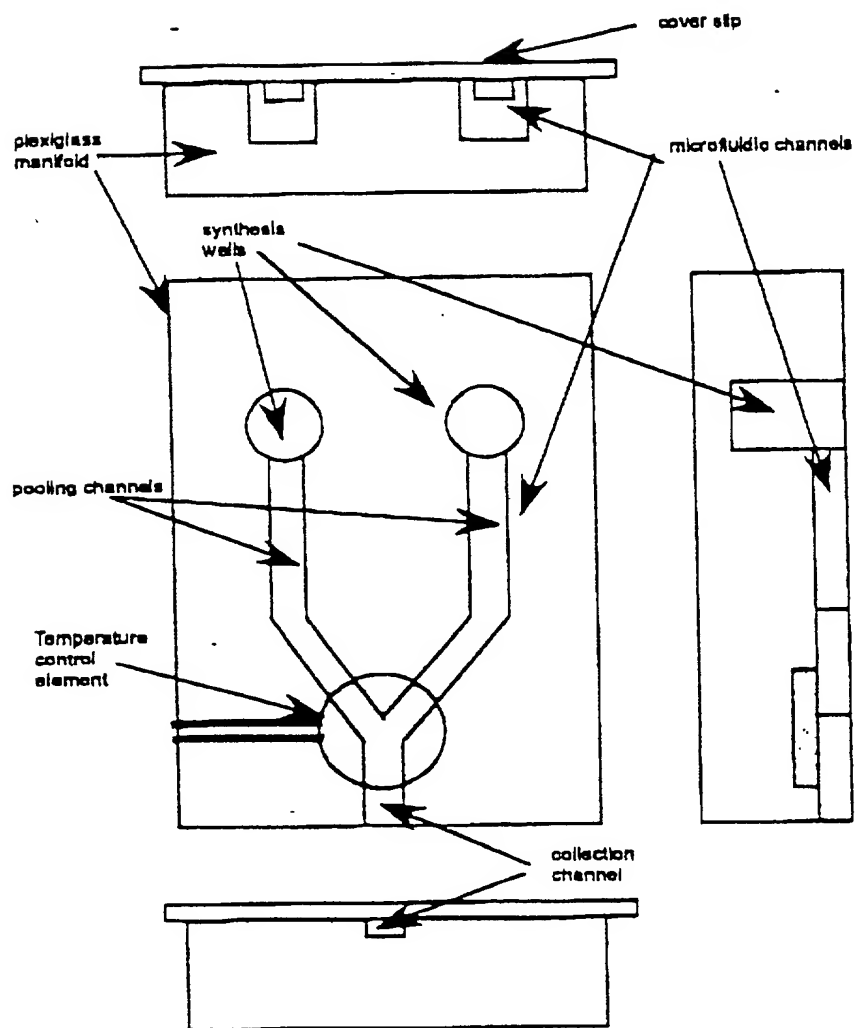


Figure 10

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Attorney Docket No. P-EA 5160

Genewriter Platform Design
8 x 96 well plates addressed with 16 piezoelectric
nanovolume dispenser heads; One wash/dry station
and one additional plate station. 8 plate evacuated by
a single vacuum station.

Capacity of 8 x 96 = 768 oligos/run

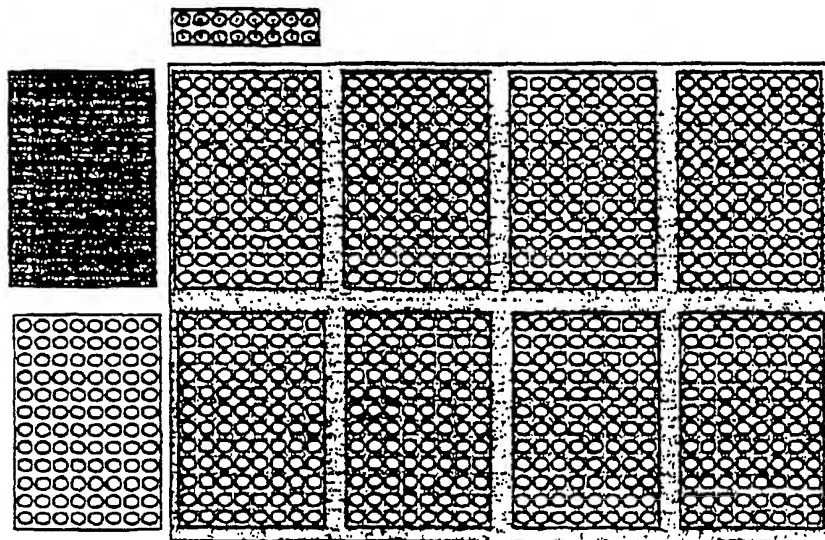


Figure 11

Genewriter Platform Design - High Capacity Mode
8 x 1536 well microassay plates addressed with 18 piezoelectric
nanovolume dispense heads; One wash/dry station
and one additional plate station. 18 plates evacuated by
a single vacuum station.

Capacity of 8 x 1536 = 12,288 oligos/run

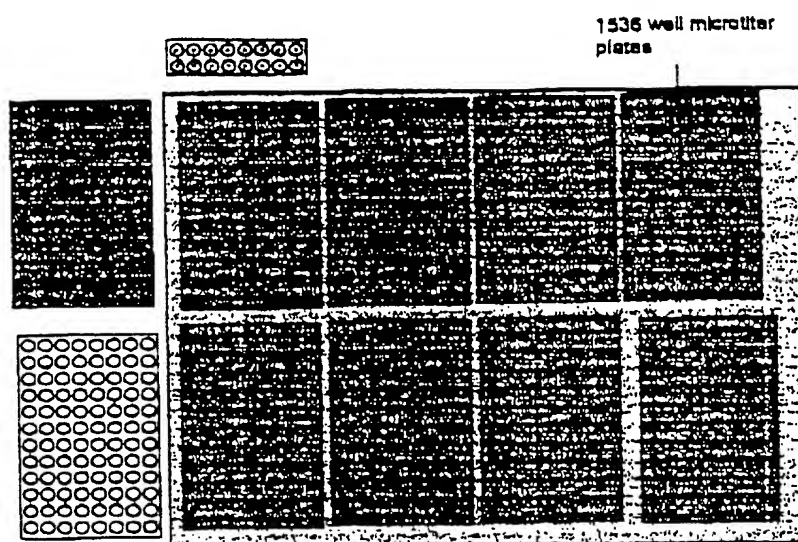


Figure 12

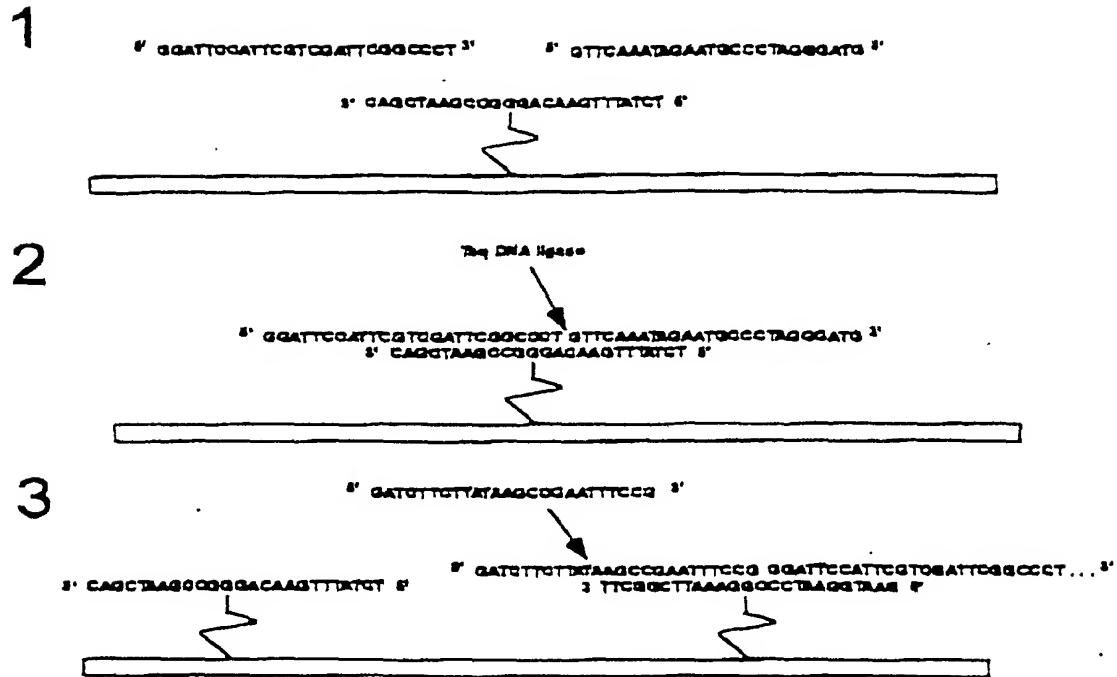


Figure 13

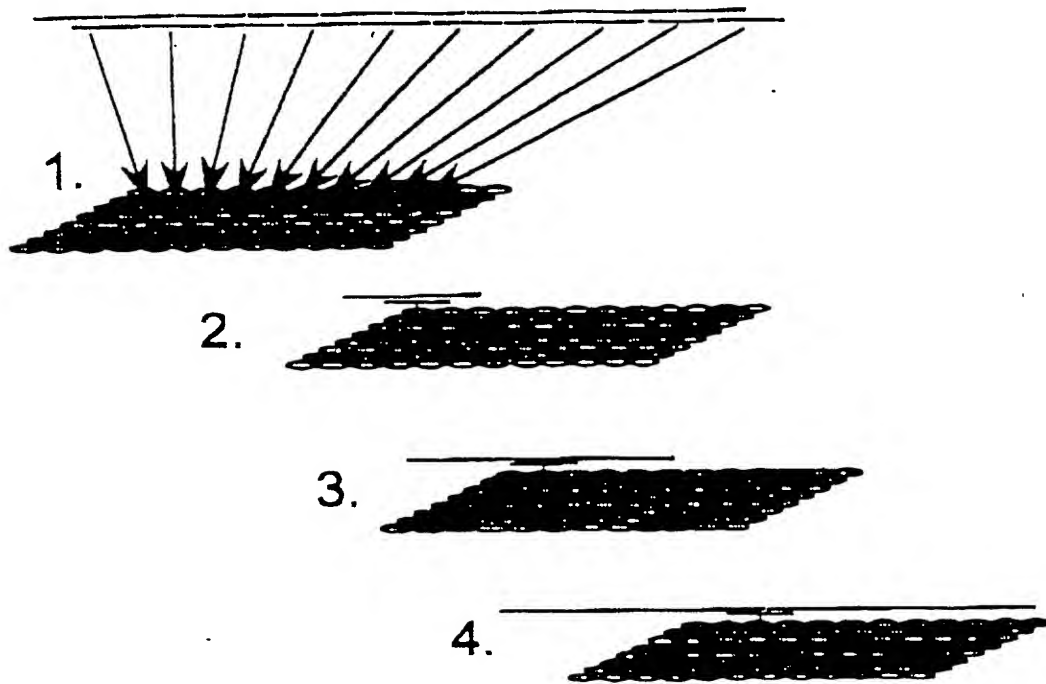


Figure 14

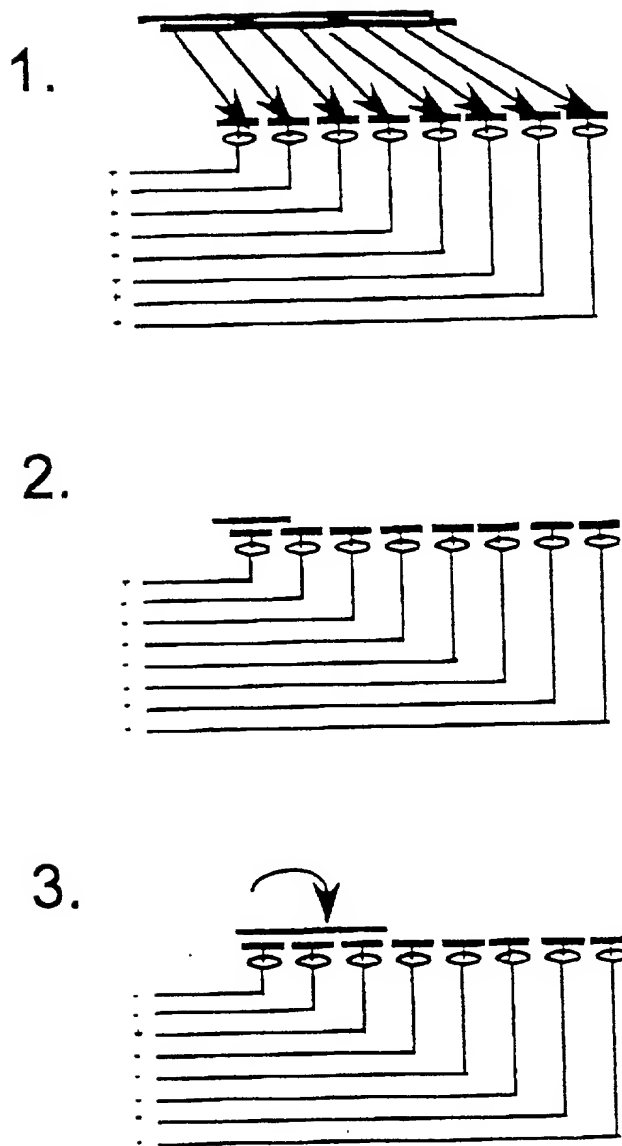


Figure 15

Bidirectional primer extension strategy for gene assembly

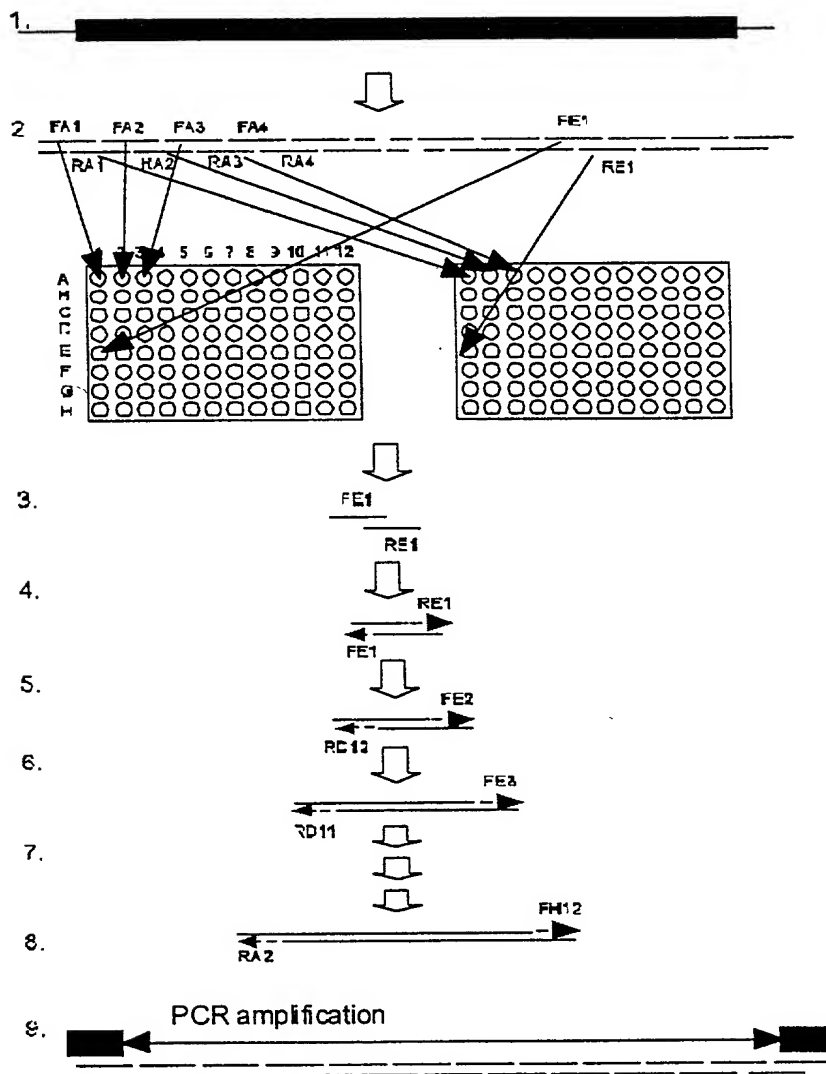


Figure 16

System Diagram for Genewriter

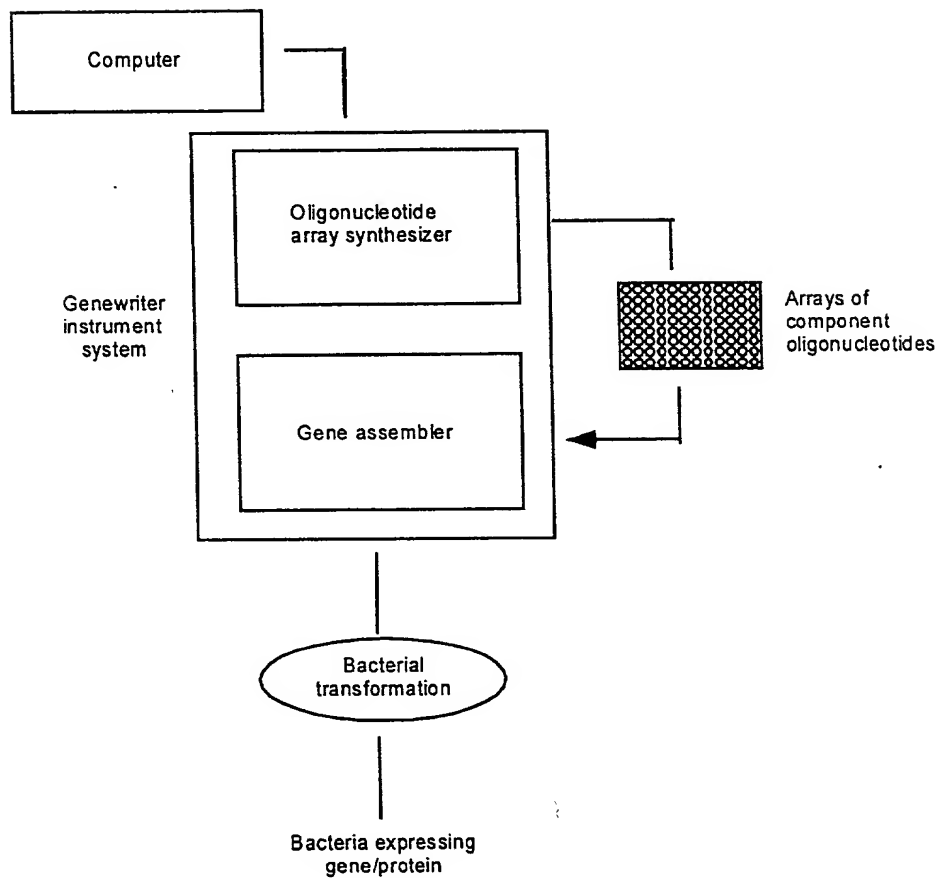


Figure 17

Perspective view of Genewriter Instrument

Genewriter diagram

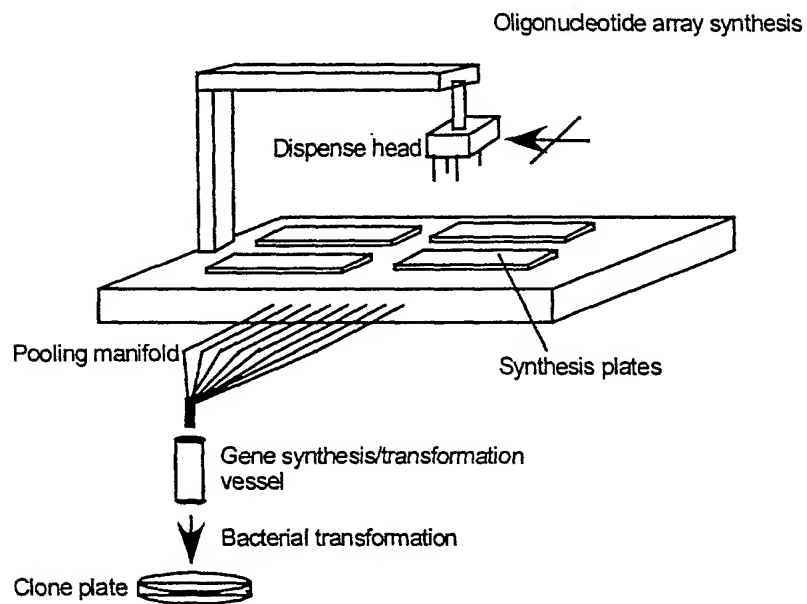


Figure 18